

Fort Des Moines Historic Complex,
Building 47
(Cavalry Drill Hall)
Des Moines
Polk County
Iowa

HABS No. IA-121-D

HABS
IOWA,
77-DESMO,
24-D-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Buildings Survey
National Park Service
Rocky Mountain Regional Office
Department of the Interior
P.O. Box 25287
Denver, Colorado 80225

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Building No. 47. Cavalry Drill Hall

The Cavalry Drill Hall, wherein Fort Des Moines cavalrymen practiced equestrian formations, stood behind Building No. 46 of the northeast corner of the parade. It was completed on April 2, 1907. Built according to the Quartermaster General's standard plan 97A, this cruciform-shaped building possessed stylized elements of Mission Revival architecture combined with those of Classical Revival. The structure was of brick joined in common bond resting on a water table foundation of concrete and limestone, and had a tile roof. The floor was of tan bark, concrete, and wood. Total cost of the building was \$47,819.00.

The spacious hall, containing 39,992 square feet, could accommodate one troop--about sixty horses and their riders. Exterior dimensions of the main facility were 244 feet 4 inches by 107 feet 10 inches. Two wings each measured 70 feet 5 inches by 16 feet 10 inches. Doorways on the sides had round arches, while the 9-over-9 double hung windows on the gable projections had three-course segmental arches. A single, large round arch window is adorned with a limestone keystone. On the south end is a sliding steel door and two garage doors. The main south entrance had a six-course segmental arch with a limestone keystone. Above the door is a limestone relieving lintel, and above that a round arched upper window. Windows immediately adjacent to the side entrances were double-hung 9 over 9 with segmental arches. The gabled parapets at the ends of the main building and the wings were curvilinear, and the ridge of the roof consisted of a pitched ventilator. A vented soffit ran beneath the underside of the eave. Large brick piers were spaced equidistantly along the walls, while a string course aligned with the window sills along all sides.

The interior of the hall was originally arranged thusly:

First floor:

Riding space, 200' x 100'
2 Property rooms, 66'-9" x 15'
1 Room, 15' x 100'
1 Gallery, 15' x 100'
1 Gallery, 25' x 100'

Interior construction consisted of a steel truss composite system with I-beams for purlins. Wood rafters measuring 4" x 12" were approximately 3½' feet on center, while 3" x 3" sleepers were roughly 16" on center. Roof sheathing was 1" x 12".

The hall was equipped with electric lighting. Repair costs were minimal through the first years following construction, although in 1913 \$250.00 went for unspecified improvements. Total expenditures for 1921 and 1922 amounted to nearly \$900.00. In 1929 the treating plant was overhauled at a cost of \$213.48, and in 1936 eight No. 21-A Perfex Unit Heaters were removed. The following year two identical heaters were installed, costing \$686.76.

Numerous changes have been made to the building. On the exterior, storm windows have been added, and the masonry was repointed in 1985. A fire escape has been added at the north end. On the inside, a cinder block building was erected, complete with rooms, partitions, and suspended ceiling. This adaptive use has been accomplished with sensitivity, however, and much of the original interior remains intact. Today the U.S. Navy utilizes the building as a reserve training facility.(19)

19. Card for Building No. 47. "Historical Record of Buildings." NA, RG 77, Box 51; Plan, "Cavalry Drill Hall," No. 97A, September, 1905, December, 1905, and February, 1907, 13 sheets. NA, RG 77. Cartographic Archives Division; Field survey notes, February 20-22, 1987.